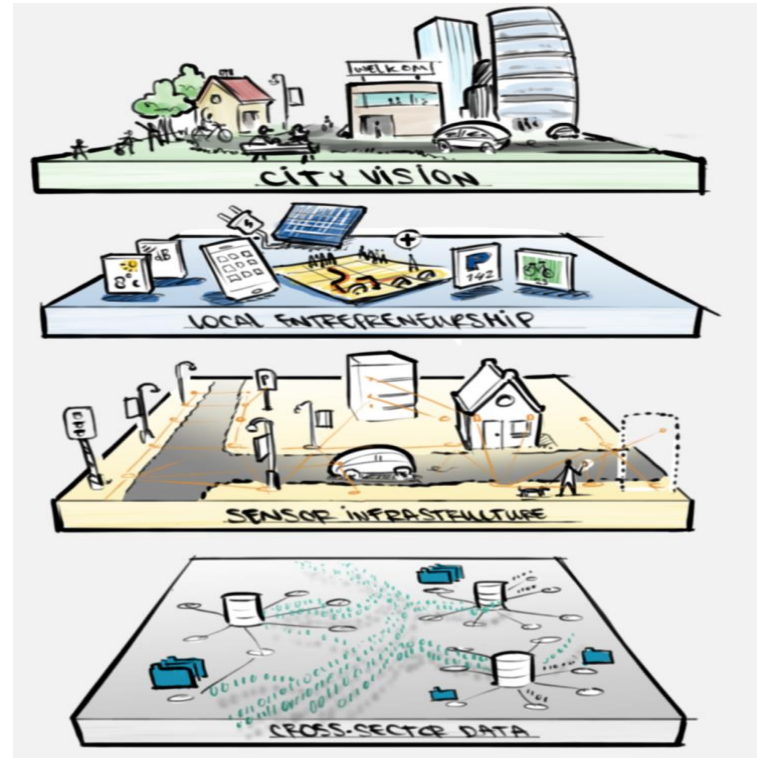# Living Lab Scheveningen

'Using redevelopment to create a
5G Based Digital infrastructure'

Marijn Fraanje CIO The Hague

The Hague Digital Vision

Solving City Challenges
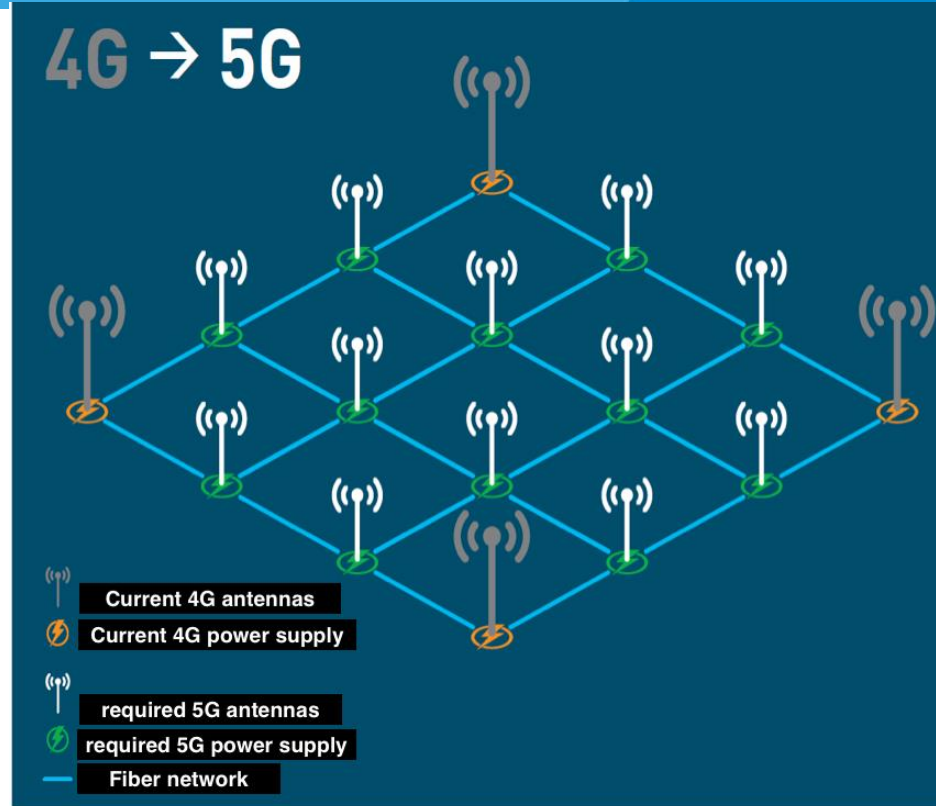
- **Energy transition**

- **Mobility transition**

- **Urbanization**

- **Social inclusion**

- **Economic development**

The Impact of 5G in the city

- **4 x more antennas with 5G (15.000 per provider)**
- **Fiber, POPs, mini datacenters and DC power supply**
- **Regulations that dictate facilitation of Telco's**
- **Be in control of the public space**

4G → 5G

Current 4G antennas
Current 4G power supply

required 5G antennas
required 5G power supply
Fiber network

Living Lab Scheveningen

Urban Development as a Smart City Accelerator

- **Integrate 5G infrastructure with Urban Planning**
- **Use existing budget for Finance**
- **Create new smart applications**
- **Create new Business Models**

LIVING LAB SCHEVENINGEN

INTEGRATIE VAN STEDELIJKE ONTWIKKELING EN SMART CITY INFRASTRUCTUUR
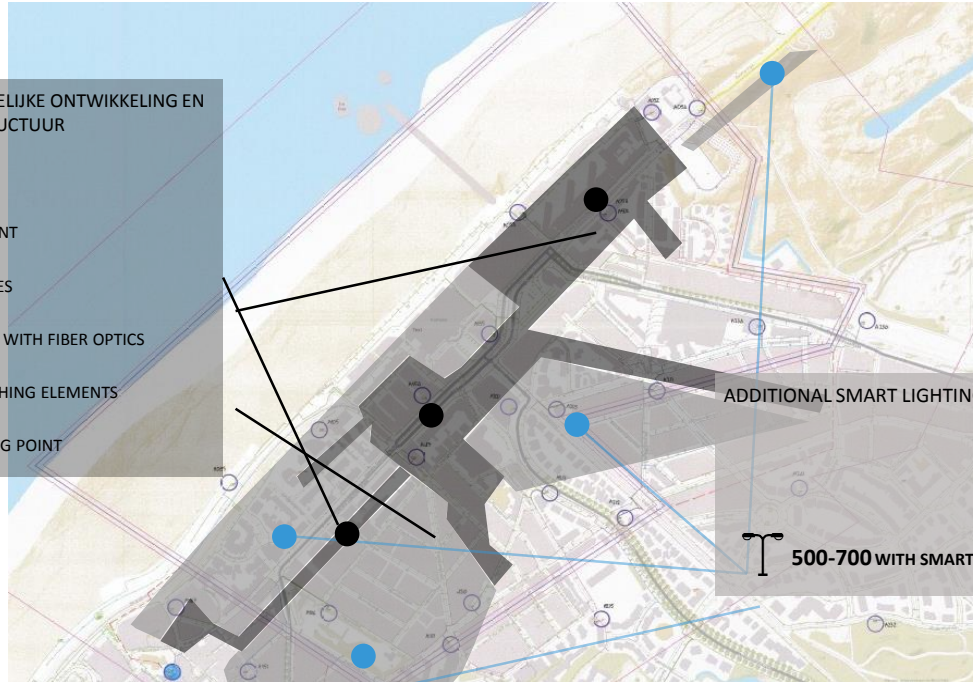
763 SENSOR POINT

180 4G ANTENNES

263 LIGHTPOLES WITH FIBER OPTICS

263 SMART LIGTHING ELEMENTS

150 EV CHARGING POINT

ADDITIONAL SMART LIGHTING ELEMENTS

500-700 WITH SMART SENSORING

MODULAIR LIGHT POLES

SMART ENVIRONMENT

SMART PARKING

Lessons Learned (1)

- **5G Based Digital infrastructure essential for innovation**

- **Different approach to asset management and budgeting (integral)**

- **Develop a multidisciplinary team to combine smart city and Urban Development**

- **Develop supporting public maintenance policies**

Lessons Learned (2)

- **By using redevelopment costs are 1/5 of the traditional way (€10,75 p/m instead of €50,-)**
- **High availability of capital investment**
- **Organize participation to improve support**
- **You only get it financed if you combine use-cases (The Hague identified 147 use-cases)**

Next steps

- **Combined team from The Hague and the province South Holland start this year with the first 10 use cases.**
- **Policy decision to use all redevelopment projects to create a digital infrastructure.**
- **Extension of the test area to International Zone and Central Innovation District**
- **Cooperation with different parties to start use-cases and tests in those.**

Enjoy Scheveningen & The Hague

''Thank you for your attention'